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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996

CC Docket 98-146

COMMENTS OF COMCAST CORPORATION

1. Introduction and Summary

Comcast Corporation ("Comcast") respectfully files these comments in the above-captioned matter. Comcast is the fourth largest domestic cable multiple system operator, serving over 4.3 million customers in 23 states. Comcast has a strong interest in the development of the nation's competitive communications infrastructure, reflected in its ownership of cable systems (including systems that have deployed the Comcast@Home high-speed Internet access service) and wireless telephone systems, and its provision of local exchange and interexchange telecommunications.

This proceeding is being conducted to implement Section 706(b) of the Telecommunications Act of 1996 (the "Act").[1] There is no need for Commission action under Section 706 if the market is already moving to ensure that "advanced telecommunications capabilities" are being deployed "in a reasonable and timely fashion." Based on the record of the earlier Section 706 proceedings, this appears to be

[1] Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, *codified at* 47 U.S.C.§§ 151 *et seq.*

the case. However, should the Commission nevertheless conclude that some action is warranted, Comcast suggests two particular pro-competitive, deregulatory actions that would help spur the deployment of "advanced telecommunications capabilities."

Section 706(b) imposes a two-part obligation on the Commission. First, the Commission must assess whether "advanced telecommunications capabilities" are being deployed "in a reasonable and timely manner." Second, if there is a problem with the pace of deployment, the Commission is to take steps to remove barriers to competitive entry.

Congress envisioned an orderly process of periodic assessments of the market, followed by carefully considered Commission action, if necessary. As events unfolded, however, the Commission was confronted with a rash of petitions calling for certain specific (and somewhat radical) action under Section 706 — *i.e.*, setting aside the core pro-competitive provisions of the 1996 Act for the purported reason of promoting telephone company investment in xDSL and high-capacity Internet backbone facilities — prior to conducting the required broad-based market assessment.[2]

Those petitions were properly rejected on various grounds.[3] As articulated

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[2] Petition of Bell Atlantic (filed January 26, 1998), CC Docket No. 98-11; Petition for Relief [filed by U S WEST] (filed February 25, 1998), CC Docket No. 98-26; Petition of Ameritech Corporation (filed March 5, 1998), CC Docket No. 98-32 (collectively, the "Section 706 Petitions"). Comcast filed reply comments in the proceedings on the Section 706 Petitions. Reply Comments of Comcast Corporation, CC Docket Nos. 98-11, 98-26, and 98-32 (filed May 6, 1998) ("*Reply Comments*").

[3] In the Matters of Deployment of Wireline Services Offering Advanced Telecommunications Capability; Petition of Bell Atlantic Corporation For Relief from Barriers to Deployment of Advanced Telecommunications Services; Petition of U S WEST Communications, Inc. For Relief from Barriers to Deployment of Advanced Telecommunications Services; Petition of Ameritech Corporation to Remove Barriers to Investment in Advanced Telecommunications Technology; Petition of the Alliance for Public Technology Requesting Issuance of Notice of Inquiry and Notice of Proposed Rulemaking to Implement Section 706 of the 1996 Telecommunications Act; Petition of the Association for (continued...)

in its *Reply Comments*, Comcast's primary concern in those proceedings was that the petitions failed fully to convey to the Commission the technical complexity and market dynamics of the Internet.[4] As a result, in Comcast's view, the petitioners were asking the Commission to take actions directed towards solving a problem — an allegedly "slow" Internet backbone and inadequate end user access to it — that probably did not exist at all, or, if it did, would not be solved by taking the requested action.

In the earlier proceedings, it was assumed without significant analysis that "high-speed Internet access" was a form of the "advanced telecommunications capability" that Section 706 was intended to encourage. This was probably inevitable in light of the focus of the petitions. In fact, however, Section 706 is both broader and narrower than the Internet. It is broader in that the relevant "capability" is "high-speed, switched, broadband ***telecommunications*** capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications using any technology." *See* Section 706(c)(1). Nothing about this definition, for example, indicates that it would not apply to basic circuit-switched connections of adequate bandwidth, without regard to whether they connect to the Internet. At the same time, Section 706 is narrower than the Internet, in that the focus is on ***telecommunications*** capability — shipping data from Point A to Point B — whereas the core value of the Internet is as an ***information services*** medium — allowing users to retrieve, store, manipulate, and interact with data.

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[3](...continued)
Local Telecommunications Services (ALTS) for a Declaratory Ruling Establishing Conditions Necessary to Promote Deployment of Advanced Telecommunications Capability Under Section 706 of the Telecommunications Act of 1996; Southwestern Bell Telephone Company, Pacific Bell, and Nevada Bell Petition for Relief from Regulation Pursuant to Section 706 of the Telecommunications Act of 1996 and 47 U.S.C. § 160 for ADSL Infrastructure and Service, *Memorandum Opinion and Order and Notice of Proposed Rulemaking*, CC Docket Nos. 98-147, 98-11, 98-26, 98-78, and 98-91 (released August 7, 1998) ("*Section 706 Order*").

[4] *See Reply Comments, passim.*

This illustrates that, despite (or perhaps because of) the focus on the Internet in the earlier proceedings, the Commission should take this opportunity to give a fresh look to the true scope of Section 706. As described below, while the overall purpose of the 1996 Act is deregulatory, on its face Section 706 is a regulatory statute. Specifically, it directs governmental entities (federal and state regulators) with jurisdiction over telecommunications services (regulated under Title II) to implement certain regulatory methods (*e.g.*, price cap regulation and regulatory forbearance) to achieve a public policy goal (timely deployment of "advanced telecommunications capability"). It does not authorize an expansion of Title II regulation to include entities (such as Internet Service Providers ("ISPs")) or services (such as Internet access) that are not now subject to Title II; to do so would, by increasing rather than decreasing regulation, defeat the policy goal and thereby frustrate Congress' intent in passing the law in the first place.

As a result, if the Commission finds that "advanced telecommunications capability" is not being deployed rapidly enough, any remedial action must be directed toward lessening the regulatory burdens on current and potential telecommunications carriers that might provide such capability. Consistent with that direction, the Commission should consider using its preemption and forbearance powers to ensure that (a) regulation of CLECs is kept to a minimum, and (b) the deployment of advanced telecommunications capability is not hindered by unduly aggressive efforts by some local authorities to regulate new facilities-based providers.

To say that Commission ***action*** under Section 706 is properly limited to regulatory policies regarding carriers, however, is not to say that the Commission's ***inquiry*** should be so limited. To the contrary, as the *Notice of Inquiry* itself recognizes, it appears that, at least in the short run, consumer demand for "advanced telecommunications capability" will arise from consumer demand for information services (including those available via the Internet) that have high bandwidth requirements. Similarly, if the record demonstrates that regulatory action is necessary

to encourage the reasonable and timely deployment of such capability, it is reasonable for the Commission to examine what it can do to encourage firms that are not now offering advanced, high-bandwidth "Title II" telecommunications services to enter the market. Dealing intelligently with both of these factors will require the Commission to obtain information regarding non-telecommunications activities (*e.g.*, developments in router hardware and software) and non-carrier entities (*e.g.*, ISPs, cable operators, equipment manufacturers). And the *Notice of Inquiry* properly casts its net widely in this way.

However, those parts of the *Notice of Inquiry* that seem to focus on developing a "Grand Unified Theory" of telecommunications regulation are seriously misdirected. First, within the core realm of Title II — and more specifically, within the local exchange — the law on its face recognizes key differences between incumbent local exchange carriers ("ILECs") and competing local exchange carriers ("CLECs"). These differences are not random allocations of regulatory benefits and burdens by a capricious legislature. To the contrary, they reflect enormous differences in the real-world market situations of the different entities, as the Commission itself has previously found.[5] Second, a number of entities that could participate in some aspects of the market for advanced telecommunications services (such as cable operators and broadcasters) are subject to extensive regulatory obligations that are designed to implement policy goals other than telecommunications competition.

In these circumstances, it is, at best, premature to try to develop a single regulatory model that can or should apply to all actual and potential providers of so-called "advanced telecommunications capability." At worst, the best will become the enemy of the good, in that the Commission might forgo logical and practical steps to

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[5] In the Matter of Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Interconnection Between Local Exchange Carriers and Commercial Mobile Radio Service Providers, *First Report and Order,* CC Docket Nos. 96-98 and 95-185 (released August 8, 1996) ("*Local Competition Order*") at ¶¶ 1241-48. *See also* 47 C.F.R. § 51.223(a) (banning state application of Section 251(c) requirements to CLECs).

encourage deployment now in deference to a hypothetical regulatory model that does not — and, legally, cannot — apply to today's markets and the firms that participate in them. The Communications Act — including the 1996 Act's amendments to it — not only subjects different classes of firms to different regulatory models (*e.g.*, telecommunications providers as opposed to multichannel video programming distributors ("MVPDs")); it continues and reinforces the long-standing practice of regulating different sub-classes of firms in the same broad market differently (*e.g.*, ILECs v. CLECs in telecommunications; cable operators v. open video system ("OVS") or satellite master antenna television ("SMATV") providers in the MVPD marketplace). Nothing in Section 706 or elsewhere in the Act suggests a congressional intent to undo these carefully crafted legislative distinctions.

The remainder of these comments is organized as follows. Section 2 discusses the language and meaning of Section 706 and the nature of the task before the Commission. Section 3 briefly reviews the ways in which the market is responding to growing consumer and business demand for advanced telecommunications capability. Finally, Section 4 identifies two specific actions the Commission should take if it concludes that the market is not adequately promoting the reasonable and timely deployment of advanced telecommunications capability.

2. Section 706 Establishes Regulatory Policy For Telecommunications Carriers And Services Only, Not For Other Providers Of Advanced Services.

The instant proceeding is intended to implement Section 706 of the 1996 Act. The Commission, therefore, should begin its inquiry with a review of what that provision says.

Section 706(a) sets out the general framework applicable to this proceeding. It states that Section 706 is directed to "[t]he Commission and each State commission with ***regulatory jurisdiction*** over ***telecommunications services***." Clearly, therefore, Section 706 reflects a statement of Congress's regulatory policy for

"telecommunications services" and those who provide them, *i.e.*, "telecommunications carriers."[6] Any doubt on this score is eliminated by the fact that Congress directs the Commission and the States to use various "***regulating methods***" to achieve the goals of Section 706. Moreover, the specifically noted "regulating methods" all fall into the category of alternatives to the traditional cost-based rate-of-return regulation that the Commission and the states historically applied to Title II carriers: "price cap regulation, regulatory forbearance, [and] measures that promote competition in the local telecommunications market."[7]

The policy goal Congress identified is the deployment of "advanced telecommunications capability."[8] Section 706(b) directs the Commission to undertake the current inquiry to examine the pace of deployment of such capability. If that deployment is not proceeding "in a reasonable and timely fashion," the Commission should take "immediate action" to remedy that problem by "removing barriers to infrastructure investment and by promoting competition in the telecommunications market."

These provisions show that Congress envisioned an ongoing and orderly process by which the Commission could ensure that market demand for "advanced telecommunications capability" was being met. The Commission must periodically assess whether some form of market failure has led to a situation of unmet demand. If

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[6] In the 1996 Act, Congress defined "telecommunications services" as offering telecommunications to the public for a fee. *See* 47 U.S.C. § 153(46). Moreover, the definition of "telecommunications carrier" expressly states that the Commission may regulate an entity as a "common carrier" (*i.e.*, under Title II) only to the extent that it provides telecommunications services. *See* 47 U.S.C. § 153(44). The provisions of Section 706 must be read in light of these contemporaneously enacted definitions.

[7] As noted above, the Commission only has "regulatory" (Title II) jurisdiction over firms that provide telecommunications for a fee, *i.e.*, over carriers. The direction to achieve the policy goals of Section 706 by means of various "regulating methods" confirms that Section 706 is designed to set regulatory policy applicable to carriers.

[8] *See* Section 706(a), Section 706(b), and Section 706(c)(1).)

not — that is, if market forces are already leading carriers to meet demand "in a reasonable and timely fashion" — no regulatory action is necessary or even authorized. On the other hand, if a market failure exists, the Commission is given two ways to address it: (a) promote competition (*e.g.*, encourage new entry by new carriers); and (b) mitigate the market failure (and thereby encourage both potential and existing carriers to meet market demand) using regulatory authority available elsewhere in the law.[9] What Section 706 plainly does ***not*** do is authorize or instruct the Commission to expand the current scope of Title II regulation to embrace the activities of cable operators, direct broadcast satellite ("DBS") operators, ISPs, broadcasters, or any other current or potential broadband provider that would not otherwise by subject to Title II.

As described below, it appears that the market is responding as rapidly as reasonably possible to meet current and anticipated demand for advanced telecommunications capability. Moreover, the Commission's recent determination that high-bandwidth end user data services such as xDSL are telecommunications services subject to Section 251 (and its ongoing proceeding regarding xDSL deployment[10]) will go a long way to promote competition and to reduce barriers that may exist to the deployment of advanced telecommunications capability. If, however, the Commission concludes that additional action is needed, there are two key ways that the Commission could utilize its various statutory tools to promote such deployment, as discussed in Section 4, below.

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[9] The Commission recently determined that Section 706 is not an independent grant of authority to deregulate existing carriers. To the contrary, Section 706, properly read, directs the Commission to utilize the statutory authority granted elsewhere to achieve certain goals. *See Section 706 Order* at ¶ 69 (the statute "does not constitute an independent grant of forbearance authority or of authority to employ other regulating methods;" instead, the statute "directs the Commission to use the authority granted in other provisions, including the forbearance authority under section 10(a), to encourage the deployment of advanced services.")

[10] *Section 706 Order* at ¶¶ 35-44.

3. The Market Appears To Be Responding In A Reasonable And Timely Manner To Current And Anticipated Demand For Advanced Telecommunications Capability.

The basic meaning of the term "advanced telecommunications capability" is a combination of transmission and switching technology of sufficient bandwidth and speed to enable end users to communicate large volumes of information where they want it to go. Advanced telecommunications capability is different from high-capacity point-to-point services because the definition specifies that the capability include switching, *i.e.*, the ability of the customer to choose the destination of the data on a communication-by-communication basis. And it differs from today's "plain old telephone service" network — in the area of bandwidth — because the standard 3 Khz (analog)/56 kbps (digital) voice channel is unable to handle "high quality video," for example, even using the most advanced data compression and streaming techniques.

So the basic questions are the size of the "pipes" in the nation's telecommunications infrastructure, and the capacity of the switches to which they are connected. As indicated in Comcast's *Reply Comments*,[11] as well as many filings by other parties, the market is moving rapidly to address the growing demand to increase the capacity of both of these elements of the network.

The situation is clearest with regard to the pipes. The vast amounts of optical fiber in place and being deployed within carrier networks provides, in the abstract, an enormous capacity for carrying customer data. While one can presumably imagine an even more frenzied deployment of additional interexchange capacity than is already occurring, the facts do not support a finding that the current pace of deployment is not "reasonable" and "timely" as required by the statute.

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[11] *See Reply Comments* at 4-19. *See also Notice of Inquiry* at ¶ 55 ("We are struck by the large number of companies that assert they have or soon will have the capability to deploy what appear to be major elements of advanced telecommunications capability and many advanced services.")

The market is also rapidly addressing the "last mile" question. CLECs in particular are aggressively pursuing efforts to upgrade the copper local loop infrastructure from narrow- to high-bandwidth status, mainly by use of xDSL technology. Prodded by these efforts, the ILECs themselves have either deployed (*e.g.*, U S West) or announced (*e.g.*, Bell Atlantic, BellSouth) such offerings. Efforts are also underway to integrate xDSL functionality into devices that can be deployed at the "far" end of digital loop carrier ("DLC") systems.[12] This will vastly expand the capacity of existing loop plant, both because current DLC loops are not suitable for xDSL, and because the average length of the copper portion of the loop in DLC arrangements is shorter than the average length of end-to-end copper loops. Other telecommunications technologies that offer broadband "last miles" (*e.g.*, satellite-delivered services) are being deployed as well.[13]

It should not be surprising that the most urgent demands for conversion of existing copper loop plant from narrowband to broadband status are coming from the CLECs. Almost by definition, these are entrepreneurial entities with no vested interest in current serving arrangements or legacy technologies. They will therefore tend to focus on the telecommunications needs of the future, not the past. By the same token, ILECs — who ***do*** have a vested interest in current serving arrangements and legacy technologies — would logically be expected to proceed more cautiously. The Commission has already been confronted with some of the conflicts that these different market positions inevitably engender, and is trying to resolve those conflicts in a way that will promote, not hinder, the rapid deployment by ***both*** CLECs ***and*** ILECs of these broadband "last miles."[14]

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[12] *See Section 706 Order* at ¶¶ 165-76 (discussing, *inter alia,* sub-loop unbundling and the possibility of placing digital subscriber line access multiplexers ("DSLAMs") or similar equipment at the "far" end of a DLC system, both by ILECs and by CLECs).

[13] *See, e.g.,* Statement of Steve Hooper (Teledesic) at July 9, 1998 *en banc* Hearing on Bandwidth, available at http://www.fcc.gov/enbanc/070998/teledesi.pdf.

[14] *See generally Section 706 Order.*

The question of how to meet the demand for "broadband switching" is more complex. Modern end-office circuit switches are the culmination of a long technical evolution of devices optimized for voice traffic, and it is hard to see how existing voice switches could be upgraded or retrofitted (in a broad analogy to what xDSL technology does for copper loops) to accommodate high-bandwidth switching functions. Moreover, it is not immediately clear whether broadband switching requirements will best be addressed by a circuit-based architecture (*e.g.*, add-drop multiplexers that allow individual DS-1 or higher-speed circuits to be extracted from, or added to, even higher-capacity circuits); by a packet-based architecture (*e.g.*, asynchronous transfer mode and frame relay technologies, combined with the so-called "terabit routers" referenced in Comcast's *Reply Comments*[15]); or by some combination of these or other technologies at different points in the network.

The existence of these technical questions, however, is not evidence of market failure; it simply shows that in this complex area, the "right" answers are not yet obvious to the market (or anyone else). There can be no doubt, however, that various market participants are highly motivated to find the answers, refine their business strategies to take account of them, and then invest to implement their strategies as soon as possible.

From Comcast's perspective, these circumstances do not present a strong case for regulatory intervention under Section 706. As discussed above, that statute directs the Commission to determine whether "advanced telecommunications capability" is being deployed "in a reasonable and timely fashion," and to remove entry barriers and promote competition if it is not. This language indicates that what constitutes a "reasonable" pace of deployment is to be determined by gauging the market demand for

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[15] *See Reply Comments* at n.17, *citing* C. Wilson, "Optical Router Could Pump Up Internet Speeds," *Inter@ctive Week* (April 20, 1998) at 14 (emphasis added) ("Avici Systems Inc. and Northern Telecom Inc. are combining to create what could be the first in a series of products that would boost the routing of data on Internet backbones to speeds in excess of a ***trillion*** bits of data per second.")

high-bandwidth telecommunications services and assessing whether carriers are fully and promptly responding to that demand. Only if there is real demand for these services that (for some reason) the market is ***not*** moving to meet would it make sense to try to tinker with the situation by adjusting "regulating methods" applicable to the "providers of telecommunications services" addressed by the statute.[16]

4. The Commission Should Consider Two Specific Steps If It Concludes That Action Under Section 706 Is Warranted.

The facts before the Commission in the earlier proceedings on the individual Section 706 petitions suggest that the market is already driving carriers to deploy advanced telecommunications capability to meet consumer demand. However, were the Commission to conclude otherwise, Comcast has two suggestions for the Commission to consider. Each would encourage the deployment of advanced telecommunications capability in ways that — consistent with the statute — reduce regulation and promote competition, and each would be justified on statutory grounds independent of Section 706.[17] These are discussed below.

a. The Commission Should Re-Affirm And Expand The Existing Limitations On Regulation Of CLECs.

One of the most durable barriers to entry into telecommunications markets is the prospect that new entrants will be subjected to burdensome regulation.[18]

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[16] It is critical to judge the reasonableness of the pace of deployment by reference to market demand, because any other course leads to an essentially standardless injunction to "go forth and upgrade the network." While an upgraded network may be a good thing in the abstract, in the practical world the questions are ***how much, how rapidly***, and ***in what ways*** to upgrade the network. Without the external standard of market demand as a touchstone, it is impossible to answer these questions.

[17] *See Section 706 Order* at ¶ 69.

[18] This situation is tacitly recognized in the oft-repeated description of MCI in its early, (continued...)

Conversely, clear and emphatic limitations on the scope of regulation create an environment in which firms can respond to market demand without fear either that their decisions will be second-guessed by governmental agencies or that they will be forced to enter markets or offer services that they do not want to enter or offer.

The Commission itself has long understood this problem and has persistently chipped away at such regulatory barriers. This is the basic rationale for the long-standing policy that non-dominant carriers need only be regulated lightly, if at all.[19] When new entrants have to compete with an established incumbent, market forces will require them to offer better or cheaper services simply to survive, so there is no reason to regulate them. And, when new entrants have sufficiently eroded the incumbent's market power, there is no reason to maintain the full range of existing regulations on the incumbent, either.[20] The Commission's consistent application of this policy in the long distance market, and the flourishing of long distance competition that resulted, must be recognized as one of the regulatory success stories of the last twenty years.

The language and structure of the 1996 Act shows that Congress understood, embraced, and reinforced this long-standing Commission policy, and plainly envisioned that it would be applied to the local exchange market. For example, as the

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[18](...continued)
glory days — "a law firm with an antenna on top." The key barriers to entry that MCI faced in its efforts to offer competitive long distance services were not technical, operational, or financial. They were legal and regulatory.

[19] *See* In the Matter of Motion of AT&T Corp. to be Reclassified as A Non-Dominant Carrier, *Order*, 11 FCC Rcd 3271 (1995) at ¶¶ 3-7 (reviewing history of relaxed regulation of non-dominant carriers).

[20] *See id* at ¶ 1 ("[W]e find that the record evidence demonstrates that AT&T lacks market power in the interstate, domestic, interexchange market, and accordingly, we grant its motion to be reclassified as a non-dominant carrier with respect to that market.") *and passim* (discussion and analysis of record evidence supporting the conclusion that AT&T lacks market power in the interstate, domestic, interexchange marketplace).

Commission found in the *Local Competition Order*, Section 251(c) contains specific duties applicable to ILECs — such as unbundling of network elements and collocation — that should not (as a policy matter) and may not (as a legal matter) be applied to CLECs.[21] As another example, the Commission's authority under Section 10 plainly permits the Commission to forbear from regulating specific classes of carriers — authority which the Commission has exercised to largely deregulate competitive access providers in the *Hyperion* order.[22] Finally, the combination of new Section 214(e) and new Section 254 allows new carriers to (in effect) "opt out" of universal service obligations (with the result that the carrier is not entitled to universal service subsidies), which removes the barrier to entry presented by the possibility of having to build out a ubiquitous state-wide (or nearly state-wide) network as a precondition of entering the market. And Section 254 requires that universal service subsidies be administered, by both the Commission and the states, in a competitively neutral manner, among firms that do choose to undertake universal service obligations.

In light of these precedents, it would be a logical and direct extension of long-standing policy to clarify, in the Section 706 context, that new entrants seeking to offer services by means of "advanced telecommunications capability" may do so with solid assurances that their "reward" for doing so will not be the imposition of significant regulatory burdens.

There are three classes of entities that might meaningfully contribute to the deployment of advanced telecommunications capability in the course of entering one or more telecommunications markets, but that are significantly deterred from doing so in

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[21] *Local Competition Order* at ¶ 1241-48. *See also* 47 C.F.R. § 51.223(a) (banning state application of Section 251(c) requirements to CLECs).

[22] *See* In the Matters of Hyperion Telecommunications, Inc. Petition Requesting Forbearance; Time Warner Communications Petition for Forbearance; Complete Detariffing for Competitive Access Providers and Competitive Local Exchange Carriers, *Memorandum Opinion and Order and Notice of Proposed Rulemaking,* 12 FCC Rcd 8596 (1997), *passim*.

the face of regulatory uncertainty and risk. These are: (1) cable operators; (2) ISPs; and (3) broadcasters.

Cable operators — particularly those who have upgraded their plant to two-way hybrid fiber/coax — have a network in place that can carry large amounts of data.[23] Just as the traditional voice network was optimized for narrowband voice traffic (albeit two-way and switched), however, cable networks are optimized for broadband video traffic (albeit one-way and unswitched). The traditional voice network can be modified to offer high-bandwidth telecommunications services by the addition of xDSL and appropriate high-capacity switching functionalities. Similarly, the technology is now available to modify a traditional cable network to offer two-way switched services by the addition of a return path and appropriate high-capacity switching functionalities.

ISPs traditionally serve as the point of interface between the Internet and the retail market. As consumers demand higher-bandwidth connections to the Internet in order to take advantage of new information services (such as video-streaming-on-demand[24]) one way that ISPs will respond is by deploying higher-capacity routers that can handle more packets per second.[25] This creates an opportunity for ISPs to use high-speed routers not only to provide information services, but also to provide "plain vanilla" telecommunications, either by transmitting high-bandwidth customer data streams over the Internet itself or by routing them to long distance or local exchange carriers that are technically equipped to handle them.[26]

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[23] Certain other MVPDs, including DBS and OVS providers, are also potential providers of such services.

[24] *See, e.g.,* R. Tedesco, "ESPN in a zone with the NFL," *Broadcasting & Cable* (August 31, 1998) at 52 (reporting that "ESPN Internet Group ... intends to stream same-day game clips on www.NFL.com").

[25] Another ISP response to this demand will likely be increased use of caching. *See Reply Comments* at 9 & n.21.

[26] Cable operators, who are increasingly performing the role of ISP, may provide these other functions as well.

Finally, as the Commission notes in the *Notice of Inquiry,* television broadcasters have been assigned a great deal of additional spectrum for use in providing digital television, and have been permitted to utilize a substantial portion of that additional spectrum for services such as the transmission of data to customers, subject to certain conditions (*e.g.*, the payment of license fees to the federal government). It seems likely that technologies can be developed that would permit those data transmissions to be offered as a "telecommunications" service to third parties.[27]

At present, none of these classes of entities — cable operators, ISPs, or broadcasters — is subject to Title II regulation. As the Commission has repeatedly held, ISPs offer information services, a classification that is "mutually exclusive" of telecommunications services, and therefore not subject to regulation.[28] Cable operators, of course, offer cable services, which Congress has specifically directed may ***not*** be

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[27] DBS providers are another group currently on the periphery of telecommunications markets that might contribute to the deployment of advanced telecommunications capabilities. As discussed in Comcast's *Reply Comments*, the DirecPC service uses DBS technology to transmit high-bandwidth Internet data to end users. *See Reply Comments* at 15-16. With the ongoing development of voice-over-Internet Protocol technology, for example, one can imagine ways in which DBS providers, just like terrestrial broadcasters, could offer high-bandwidth telecommunications services along with their more traditional video fare.

[28] *Contrast* 47 U.S.C. § 153(20) (defining "information service" as offering "a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing or making available information via telecommunications") *with* 47 U.S.C. § 153(43) (defining "telecommunications" as "the transmission, between or among points specified by the user, of information of the user's choosing without change in the form or content of the information as sent and received") and 47 U.S.C. § 153(46) (defining "telecommunications service" as "the offering of telecommunications for a fee"). The Commission has repeatedly relied on this distinction to conclude that ISPs, because they offer information services, are not telecommunications carriers and, therefore, not subject to regulation under Title II. *See, e.g.*, In the Matter of Federal-State Joint Board on Universal Service, *Report To Congress*, CC Docket No. 96-45 (April 10, 1998) at ¶ 13 ("We conclude ... that the categories of 'telecommunications service' and 'information service' in the 1996 Act are mutually exclusive."). *See id.* at ¶ 21 (footnote omitted) ("We find ... that Congress intended to maintain a regime in which information service providers are not subject to regulation as common carriers merely because they provide their services 'via telecommunications'.")

subject to Title II regulation.[29] And broadcasters offer television broadcasting, subject to its own unique (but, to the broadcasters, familiar) regulatory regime under Title III.

Each of these groups of firms will divert resources away from offering services competitive with "telecommunications" if the result of providing such nascent competition is — or even might be — oppressive regulatory obligations such as rate regulation, unbundling, mandatory service to all potential customers on demand, or collocation. To the contrary, these firms will have every incentive to avoid deploying their potentially useful resources as "advanced telecommunications capability" — as opposed to an "advanced information services capability" or an "advanced cable capability" or an "advanced broadcast capability" — if the regulatory consequences of crossing the line into "telecommunications" are vague, potentially onerous, or both.

Fortunately, the Commission has ample authority under Section 251, Section 253, and prior Title II law to alleviate these concerns. First, the Commission could reiterate and clarify its holding in the *Local Competition Order* that CLECs seeking to provide high-bandwidth services are not subject to any of the Section 251(c)

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[29] *See* 47 U.S.C. § 541(c) (Section 621(c) of the Cable Act): "Any cable system shall not be subject to regulation as a common carrier or utility by reason of providing any cable service." Moreover, just as the 1996 Act expanded and strengthened the provisions of Title VI that draw a clear dividing line between Title VI regulation and Title II regulation (*see generally* In the Matter of TCI Cablevision of Oakland County, Inc., *Order on Reconsideration,* CSR 4790 (released September 4, 1998)), that same Act expanded the definition of cable service to specifically include information services and enhanced services. *See* 47 U.S.C. § 522(6)(B) (Section 602(6)(B) of the Cable Act) (definition of "cable service" now includes "subscriber interaction ... required for the selection ***or use*** of ... other programming service") *and* Cong. Rec. of January 31, 1996, at H1123 (emphasis added) (specific reference to subscriber interaction required for the "use" of programming added to "reflect the evolution of cable to include interactive services such as game channels and ***information services*** made available to subscribers by the cable operator, as well as ***enhanced services.***"). Cable operators offering information services, therefore, are simply offering Title VI cable services. Congress doubtless created this regime precisely in order to allow cable operators to expand their Title VI cable service offerings to include information services ***without*** any prospect of crossing over into the realm of Title II regulation. This illustrates the fact that Congress intends different types of entities with different characteristics to be

obligations at the state or federal level. Second, the Commission could reiterate, strengthen and clarify its holding in the *Hyperion* order that CLECs' jurisdictionally interstate services shall not be subject to any significant Title II requirements. Third, the Commission could issue a declaratory ruling, relying on its Section 253(a) authority, that any state or local governmental efforts to impose any Title II-like obligations on CLECs offering advanced telecommunications services constitute an impermissible barrier to entry. In each case the Commission could specifically state that the purpose of the ruling is to encourage cable operators, ISPs, broadcasters and others to enter ***telecommunications*** markets free from the prospect of traditional Title II regulation.[30]

While CLECs would generally speaking be at "parity" with each other (none of them would be regulated very much at all), as a group CLECs would be subject to much less regulation than ILECs. This result, however, is not only consistent with the law and with long-standing Commission precedent — it is actually mandated by it. It is both common as a legal matter, and logical as a policy matter, to subject new competitors in a regulated market to lesser regulatory burdens than established incumbents, at least until competition has developed enough that it makes good sense to lessen regulation of the incumbent. This is the regulatory regime that is applicable to ILECs in their core market, and to cable operators in ***their*** core market.[31] While one

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[30] The Commission plainly has the authority both to forbear from applying regulation on its own (under Section 10) and to bar states and localities from doing so if the regulation would constitute a barrier to entry (under Section 253(a)). Moreover, Congress itself has declared that only ILECs are subject to the obligations in Section 251(c). As a result, taking the steps outlined above would be fully consistent with the conclusion in the *Section 706 Order* that Section 706 does not constitute an independent grant of authority, but, instead, directs the Commission to utilize its existing powers in certain ways.

[31] For example, OVS providers and overbuilders are subject to less regulation than are incumbent "Title VI" cable operators; SMATV providers are subject to even less regulation than OVS providers and overbuilders. Also, in a competitive situation, rate regulation applies to an incumbent cable operator initially, but automatically ceases when competition develops sufficiently (as determined, in this case, by a specified level of market share erosion). *See* 47 U.S.C. § 543(a)(2) (Section 623(a)(2) of the Cable Act) (no rate regulation of cable systems subject to "effective competitive"); 47 U.S.C. § 543(*l*)(1) (Section 623(*l*)(1) (continued...)

can imagine a hypothetical local telecommunications market in which multiple providers all have relatively equal market share and little market power, such a market is quite a long way off in the real world.[32]

For this reason, Comcast suggests that the Commission need not devote substantial resources to addressing the hypothetical concern about how and whether to craft a single regulatory system applicable to all carriers that offer telecommunications services by means of advanced telecommunications capability.[33] To the contrary, the greatest challenge for the Commission right now is not to decide what regulatory regime should apply to a hypothetical multi-provider market, but rather how to foster such a market. Comcast submits that the suggestions outlined above are far more relevant to today's situation than is any abstract analysis of what perfect, minimalist regulatory regime might properly apply to a fully competitive local exchange market.[34]

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[31](...continued)
(definition of effective competition). This same policy (albeit with slightly different mechanics) applies to ILECs under Section 10 of the Act.

[32] It took competitive long distance carriers thirteen years to erode AT&T's market share (measured by access minutes) from 84.2% in the third quarter of 1984 to 50.7% in the first quarter of 1998. *See* Common Carrier Bureau, Industry Analysis Division, *Trends In Telephone Service* (July 1998) at Table 10.1. This market share erosion was facilitated by equal access obligations imposed on the main ILECs, including balloting procedures by which substantial numbers of customers were in effect automatically shifted from AT&T to competitors. While reasonable minds may differ as to how long it will take for the ILECs' local market share to erode to a point where regulation is no longer needed, given that they are starting with a 99+% share, the problem of how to deregulate the ILECs is not likely to arise in practice any time soon.

[33] *See Notice of Inquiry* at ¶¶ 77-82.

[34] In fact, given the different real-world market positions of the various entities that could be providers of advanced telecommunications capabilities, premature adoption of a regulatory regime that ignores those differences would inevitably skew the resulting development of the market in favor of certain players.

b. The Commission Should Preempt Unduly Burdensome Local Telecommunications "Franchise" Requirements.

Most local governments understand that the citizens and businesses within their jurisdiction are well-served by the development of robust competitive markets for the delivery of both traditional and advanced telecommunications services. At the same time, most local governments face understandable and unavoidable pressures both to manage the use of local rights-of-way to minimize physical disruption, and to obtain revenues from firms doing business within their borders. These pressures have led some local governments to attempt to impose significant regulatory and financial burdens on CLECs (and, in some cases, on ILECs as well). The Commission is well aware of the controversies resulting from such efforts.[35]

When a local government attempts to move beyond straightforward right-of-way management to impose franchise-like data collection and financial obligations, a new entrant seeking to offer facilities-based competition to an ILEC's actual or prospective xDSL services faces a significant barrier to entry. Negotiation and litigation over these issues can substantially delay — if not totally forestall — the placement of new copper, fiber, or coaxial cable facilities that could provide advanced telecommunications capability in competition with the ILEC's offerings. Overly aggressive local telecommunications "franchises," therefore, directly frustrate the goals of Section 706.[36]

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[35] *See, e.g.,* In the Matter of TCI Cablevision of Oakland County, Inc., *Order on Reconsideration,* CSR 4790 (released September 4, 1998); In the Matter of Classic Telephone, Inc., Petition for Preemption, Declaratory Ruling and Injunctive Relief, *Memorandum Opinion and Order,* 11 FCC Rcd 13082 (1996); *TCG Detroit v. Dearborn,* 1998 U.S. Dist. LEXIS 12737 (E.D. Mich. August 14, 1998); *AT&T Communications of the Southwest, Inc. v. City of Dallas,* 1998 U.S. Dist. LEXIS 8932 (N.D. Tex. June 8, 1998); *AT&T Communications of the Southwest, Inc. v. City of Austin,* 975 F. Supp. 928 (W.D. Tex. 1997).

[36] *See, e.g.,En Banc Transcript* at 31, lines 12-19 (statement of Mr. Hooper):

(continued...)

Congress struck a careful balance in Section 253 between the authority of local governments to manage rights-of-way and the needs of new entrants to be able to get to market quickly. Whatever the general answer to controversies between CLECs and localities under Section 253, however, in the case of advanced telecommunications capability — that is, adding the specific policy goals of Section 706 to the mix — it would appear that the balance clearly favors minimal local regulation, closely limited to legitimate and straightforward right-of-way management activities. The Commission, therefore, could materially advance the goals of Section 706 by issuing a declaratory ruling that CLECs offering high-bandwidth telecommunications services to end users (whether xDSL-based, fiber-based, cable-system-based, or otherwise) are subject only to reasonable permitting requirements, and not to any other "franchise"-like obligations such as data disclosure, commitment of capacity to the locality, or special fees.

5. Conclusion.

Section 706 directs the Commission to assess whether the market is responding to consumer demand for advanced telecommunications capabilities in a "reasonable and timely fashion." Comcast sees no basis to conclude that there is any market failure in this regard. If, however, the Commission disagrees (based on the full record of this proceeding), then there are two reasonable steps that the Commission could take.

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[36](...continued)

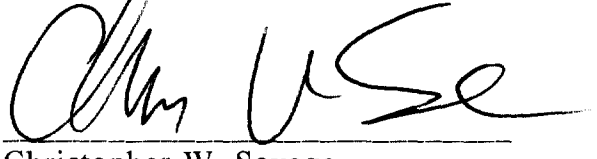
> The thing that is bothersome in this process, however, is the franchising activity that goes on that the local city level. That is becoming a huge burden for us and a real impediment to providing a cost effective alternative to the local service, where we are asked to pay, you know, substantial percents of revenue where the incumbents, because they are under different regulations, don't have to do that.

(Transcript available at http://www.fcc.gov/enbanc/070998/eb070998.html).

First, the Commission should clarify that CLECs seeking to offer telecommunications services that utilize advanced telecommunications capability (such as high-bandwidth links to the home and non-traditional switching technologies suitable to such links) will not be subject to traditional Title II regulatory requirements. Such a ruling would simply reaffirm, in the Section 706 context, the Commission's (and Congress') existing policies as embodied in Section 251, in the *Local Competition Order,* in the *Hyperion Order*, and longstanding precedent regarding regulation of non-dominant carriers. Second, the Commission should forestall overly aggressive efforts by localities to manage and regulate the deployment of advanced telecommunications capability by means of the preemptive authority granted to the Commission under Section 253.

Respectfully submitted,

COMCAST CORPORATION

By: 

Christopher W. Savage
James F. Ireland
Karlyn D. Stanley
COLE, RAYWID & BRAVERMAN, L.L.P
1919 Pennsylvania Avenue, N.W.
Suite 200
Washington, D.C. 20006
(202) 659-9750

Of Counsel:

Joseph W. Waz, Jr.
Vice President, External Affairs & Public Policy Counsel
Comcast Corporation
1500 Market Street
Philadelphia, Pennsylvania 19102

James R. Coltharp
Senior Director, Public Policy
Comcast Corporation
1317 F Street, N.W.
Washington, D.C. 20004

Dated: September 14, 1998

CERTIFICATE OF SERVICE

I, Linda M. Blair, a secretary with the law firm of Cole, Raywid & Braverman, L.L.P., do hereby certify that copies of the foregoing were sent via hand delivery, this 14th day of September, 1998, to the following:

The Honorable William E. Kennard
Chairman
Federal Communications Commission
1919 M Street, N.W., Suite 814
Washington, D.C. 20554

Thomas Power, Advisor on Common Carrier and
Cable Issues to Chmn. Kennard
Federal Communications Commission
1919 M Street, N.W., Suite 814
Washington, D.C. 20554

Commissioner Susan Ness
Federal Communications Commission
1919 M Street, N.W., Suite 832
Washington, D.C. 20554

Anita Walgren, Legal Advisor to
Commissioner Ness
Federal Communications Commission
1919 M Street, N.W., Suite 832
Washington, D.C. 20554

Jim Casserly, Senior Advisor to
Commissioner Ness
Federal Communications Commission
1919 M Street, N.W., Suite 832
Washington, D.C. 20554

Commissioner Harold Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W., Suite 802
Washington, D.C. 20554

Helgi Walker, Legal Advisor to
Commissioner Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W., Suite 802
Washington, D.C. 20554

Kevin Martin, Legal Advisor to
Commissioner Furchtgott-Roth
Federal Communications Commission
1919 M Street, N.W., Suite 802
Washington, D.C. 20554

Commissioner Michael K. Powell
Federal Communications Commission
1919 M Street, N.W., Suite 844
Washington, D.C. 20554

Jane E. Mago, Senior Legal Advisor to
Commissioner Powell
Federal Communications Commission
1919 M Street, N.W., Suite 844
Washington, D.C. 20554

Commissioner Gloria Tristani
Federal Communications Commission
1919 M Street, N.W., Suite 826
Washington, D.C. 20554

Paul Gallant, Legal Advisor to
Commissioner Tristani
Federal Communications Commission
1919 M Street, N.W., Suite 826
Washington, D.C. 20554

Rick Chessen, Senior Advisor to
Commissioner Tristani
Federal Communications Commission
1919 M Street, N.W., Suite 826
Washington, D.C. 20554

Dale N. Hatfield
Chief, Office of Engineering and
Technology
Federal Communications Commission
2000 M Street, N.W., Suite 480
Washington, D.C. 20554

Robert Pepper
Chief, Office of Plans and Policy
Federal Communications Commission
1919 M Street, N.W., Suite 822
Washington, D.C. 20554

Stagg Newman
Office of Engineering & Technology
Federal Communications Commission
2000 M Street, N.W., Suite 480
Washington, D.C. 20554

Jason D. Oxman
Federal Communications Commission
1919 M Street, N.W., Suite 534-W
Washington, D.C. 20554

Marcelino Ford-Levine
Federal Communications Commission
1919 M Street, N.W., Suite 530-A
Washington, D.C. 20554

Edward B. Krachmer
Federal Communications Commission
1919 M Street, N.W., Suite 518
Washington , D.C. 20554

Kathryn C. Brown
Chief, Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Suite 500-B
Washington , D.C. 20554

James D. Schlichting, Deputy Bureau Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Suite 500
Washington, D.C. 20554

Lawrence E. Strickling, Deputy Bureau
Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Suite 500
Washington, D.C. 20554

Yog Varma, Deputy Bureau Chief
Common Carrier Bureau
Federal Communications Commission
1919 M Street, N.W., Suite 500
Washington, D.C. 20554

Deborah Lathen
Chief, Cable Services Bureau
Federal Communications Commission
2033 M Street, N.W., Suite 918
Washington, D.C. 20554

William H. Johnson, Deputy Bureau Chief,
Cable Services Bureau
Federal Communications Commission
2033 M Street, N.W., Suite 918
Washington, D.C. 20554

Barbara Esbin, Associate Bureau Chief
Federal Communications Commission
2033 M Street, N.W., Suite 918
Washington, D.C. 20554

Linda M. Blair